## **REMARKS**

Entry of the foregoing and reexamination and reconsideration of the subject application, as amended, pursuant to and consistent with 37 C.F.R. § 112, are respectfully requested in light of the following remarks.

Claims 1-9 and 34 are pending in this application. Claims 10-33 were previously cancelled.

Claim 1 has been amended to delete the compound - (4E,6E)-7-{3-[2-(3,4-bis-hydroxymethylphenyl)-ethyl] phenyl}-3-ethylnona-4,6-dien-3-ol.

No new matter has been added in making this amendment.

Applicants gratefully acknowledge the Examiner's withdrawal of the rejection under 35 U.S.C. §112, second paragraph.

## 35 U.S.C. §101

Claims 1-9 and 34 have been rejected under 35 U.S.C. §101 as claiming the same invention as that of claim 23 of U.S. Patent No. 6,689,922.

Claim 1 was been amended to delete (4E,6E)-7-{3-[2-(3,4-bis-hydroxymethylphenyl)-ethyl] phenyl}-3-ethylnona-4,6-dien-3-ol, which is claimed in claim 23 of U.S. Patent No. 6,689,922. The remaining compounds are not disclosed in U.S. Patent No. 6,689,922.

Applicants therefore request the withdrawal of this rejection.

## **Double Patenting**

Claims 1-9 and 34 were rejected on the ground of nonstatutory obviousnesstype double patenting over claims 1-42 of U.S. Patent No. 6,689,922.

The Office Action indicates the claims are not patently distinct because the presently claimed invention has been generically claimed in the '922 patent. The Office Action refers to the compound disclosed in claim 15, col. 99, lines 38-41, where ethyl-octa are disclosed. The Office Action indicates the present invention claims ethyl-nona and that these compound are homologous. The Office Action indicates that homologous are prima facie obvious.

The first compound in claim 1, the ethyl-nona compound, has been delete.

Applicants respectfully submit that the remaining four compounds are structurally distinct, and therefore non-obvious, from the compounds of the '922 patent. The structure of the ethyl-octa compound cited above by the Examiner in the '922 patent is shown below.

7-{3-[2-(3,4-bis-hydroxymethylphenyl)-ethyl] phenyl}-3-ethylocta-4,6-dien-2-ol

The structures of the four compounds in Claim1 of the instant application are shown below, drawn in an analogous position to that of the compound above.

(E) - 6 - [3 - (3,4 - bis - hydroxymethylbenzyloxy) phenyl] - 1, 1, 1 - trifluoro - 2 - trifluoromethyloct - 5 - en - 3 - yn - 2 - ol

(3E,5E)-6-[3-(3,4-bis-hydroxymethylbenzyloxy)-phenyl]-1,1,1-trifluoro-2-trifluoromethylocta-3,5-dien-2-ol,

 $\label{lem:condition} \end{cases} \begin{tabular}{ll} \textbf{(E)-6-} & \textbf{(3,4-bis-hydroxymethylphenyl)ethyl]-phenyl}-1,1,1-trifluoro-2-trifluoromethyloct-5-en-3-yn-2-ol, \end{tabular}$ 

(3E,5E)-6-{3-[2-(3,4-bis-hydroxymethylphenyl)-ethyl] phenyl}-1,1,1-trifluoro-2-trifluoromethylocta-3,5-dien-2-ol

Each of these compounds have two trifluoromethyl groups attached to the same carbon atom.

The specification provides a comparison of the biological activity of each of these four compounds with the corresponding compound a methyl group in place of each trifluoromethyl group. (See Figures 5 and 6 for a structural comparison of the compounds tested). The concentration of each of these compounds necessary for 50% inhibition of the proliferation of human keratinocytes was determined. (Example 8, pages 37-39) The results are summarized in Table II below (see pages 38-39)

TABLE II

COMPOUND	INHIBITION OF PROLIFERATION IC50* (1M)
Calcitriol	14
Example 1	45
Example 80 of D1	1029
Example 2	153
Example 80 of D1	>10,000 (nonactive)
Example 3	35
Example 92 of D1	99
Example 4	29
Example 80 of D1	>10,000 (nonactive)
Example 5	` 8
Example 60 of D1	1506

<sup>\*</sup>Concentration for which a 50% inhibition of the proliferation of the keratinocytes is obtained.

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The results of this test indicate that each of the compounds in Claim 1 of the

instant application had an IC50 value that was much lower than that of their

counterpart compound having methyl groups in place of trifluoromethyl groups. In

fact, for three of the compounds, the IC50 was approximately 1/100th or less than

that of their counterpart compound having methyl groups in place of trifluoromethyl

groups. Such results are clearly unexpected.

Applicants respectfully submit that the deletion of the compound from Claim 1

and the unexpected results shown in the specification indicate that the compounds in

Claim 1 are not obvious over the '922 patent.

Applicants therefore request withdrawal of the double patenting rejection of

these claims.

In view of the foregoing, it is believed that the record rejections cannot be

maintained against the claims. Further, favorable action in the form of a Notice of

Allowance is believed to be next in order and is earnestly solicited. In the event that

any issues remain unresolved, the Examiner is asked to contact the undersigned so

that a personal interview can be arranged.

Respectfully submitted,

**BUCHANAN INGERSOLL & ROONEY PC** 

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